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(71) Applicant: NORDSON CORPORATION Westlake, OH 44145-1119 (US)

(72) Inventors:

- Chastine, Christopher R. Lawrenceville, GA 30043 (US)
- Pearson, Brett A.
  Duluth, GA 30097 (US)
- Riney, John M.R. Buford, GA 30519 (US)
- (74) Representative: Andres, Mark Eisenführ, Speiser & Partner Patentanwälte Rechtanwälte Postfach 10 60 78 28060 Bremen (DE)

## (54) Liquid dispensing module

(57) A liquid dispensing module includes a dispenser body assembly, a flexible seal, a needle, and an actuator. The dispenser body assembly includes a liquid inlet, a discharge outlet, and a flow channel including a valve seat between the inlet and outlet. The flexible seal engages the dispenser body assembly and includes a downstream end. The needle includes an enlarged portion engaging and retaining the downstream end of the flexible seal to place the flexible seal in lengthwise compression between the enlarged portion and the dispenser body assembly. The needle also includes a valve element that moves between open and closed positions. The flexible seal prevents liquid from leaking out of the flow channel.

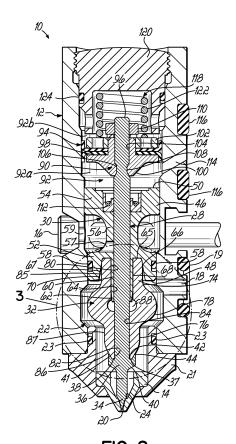


FIG. 2

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### **EUROPEAN SEARCH REPORT**

**Application Number** EP 10 16 0834

	DOCUMENTS CONSIDE	RED TO BE RELEVAN	<u>T</u>	
Category	Citation of document with indi of relevant passag		Relevan to claim	t CLASSIFICATION OF THE APPLICATION (IPC)
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				TECHNICAL FIELDS SEARCHED (IPC)
				B05B B05C F16K
	The present search report has be	en drawn up for all claims		
	Place of search	Date of completion of the sear	ch	Examiner
	Munich	15 September	2011   S	chork, Willi
X : parti Y : parti docu A : tech	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone coularly relevant if combined with another iment of the same category nological background written disclosure mediate document	E : earlier pate after the filir D : document c L : document c	pited in the applicati ited for other reaso	ublished on, or on ns

### ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 10 16 0834

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

15-09-2011

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